
BULLETIN OF ZOOLOGICAL NOMENCLATURE

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Notices

(1) Applications and correspondence relating to applications to the Commission should be sent to the Executive Secretary at the address given on the inside of the front cover and on the Commission website. English is the official language of the *Bulletin*. Please take careful note of instructions to authors (present in a one or two page form in each volume) as incorrectly formatted applications will be returned to authors for revision. The Commission's Secretariat will answer general nomenclatural (as opposed to purely taxonomic) enquiries and assist with the formulation of applications. As far as it can, the Secretariat will check the main nomenclatural references in applications. Correspondence should be sent by e-mail to 'iczn@nhm.ac.uk' where possible.

(2) The Commission votes on applications eight months after they have been published, although this period is normally extended to enable comments to be submitted. Comments for publication relating to applications (either in support or against, or offering alternative solutions) should be submitted as soon as possible. Comments may be edited.

(3) Requests for help and advice on the Code can be made direct to the Commission and other interested parties via the Internet. Membership of the Commission's Discussion List is free of charge. You can subscribe and find out more about the list at <http://list.afriherp.org/mailman/listinfo/iczn-list>.

(4) The Commission also welcomes the submission of general-interest articles on nomenclatural themes or nomenclatural notes on particular issues. These may deal with taxonomy, but should be mainly nomenclatural in content. Articles and notes should be sent to the Executive Secretary.

New applications to the Commission

The following new applications have been received since the last issue of the *Bulletin* (volume 65, part 2, 30 June 2008) went to press. Under Article 82 of the Code, the existing usage of names in the applications is to be maintained until the Commission's rulings on the applications (the Opinions) have been published.

CASE 3467: ZOSIMIDAE Seifried, 2003 (Crustacea, Copepoda): proposed emendation of spelling to remove homonymy. R. Huys & P.F. Clark.

CASE 3468: *Heteroneura* Fallén, 1823 (Insecta, Diptera): proposed conservation of usage by fixation of *Heteroneura albimana* Meigen, 1830 as type species. O. Lonsdale.

CASE 3469: *Lingula* Bruguière 1797 (Brachiopoda): proposed correction of the date of publication to 1791. C.C. Emig.

CASE 3470: *Halectinosoma* Vervoort, 1962 (Crustacea, Copepoda): proposed conservation of usage by suppression of *Pararenosetella* Lang, 1944. R. Huys.

CASE 3471: *Heterolaophonte* Lang, 1948 (Crustacea, Copepoda): proposed conservation of usage by suppression of *Mesolaophonte* Nicholls, 1941 and *Monolaophonte* Nicholls, 1941. R. Huys.

CASE 3472: *Cetiosaurus* Owen, 1841 (Dinosauria, Sauropoda): proposed conservation of usage by designation of *Cetiosaurus oxoniensis* Phillips, 1871 as type species, and proposed precedence of *Pelorosaurus conybeari* Mantell, 1850 over *Cetiosaurus brevis* Owen, 1842. P. Upchurch.

CASE 3473: *Conops testacea* Linnaeus, 1767 (Insecta, Diptera): proposed conservation of usage by designation of a neotype. D.K. Clements, J.-H. Stuke & P.J. Chandler.

CASE 3474: *Aplonis* Gould, 1836 (Aves, STURNIDAE): proposed conservation of spelling. R. Schodde & W.J. Bock.

CASE 3475: *Myrmarachne* MacLeay, 1839 (Arachnida, Araneae): proposed conservation of the generic name. J.A. Dunlop & D. Penney.

Members of ICZN council

The current members of the Council of the ICZN are Dr D. Brothers (President), Dr M. Alonso-Zarazaga, Prof. P. Bouchet, Dr R. Pyle, Dr G. Rosenberg. The position of Vice President is vacant.

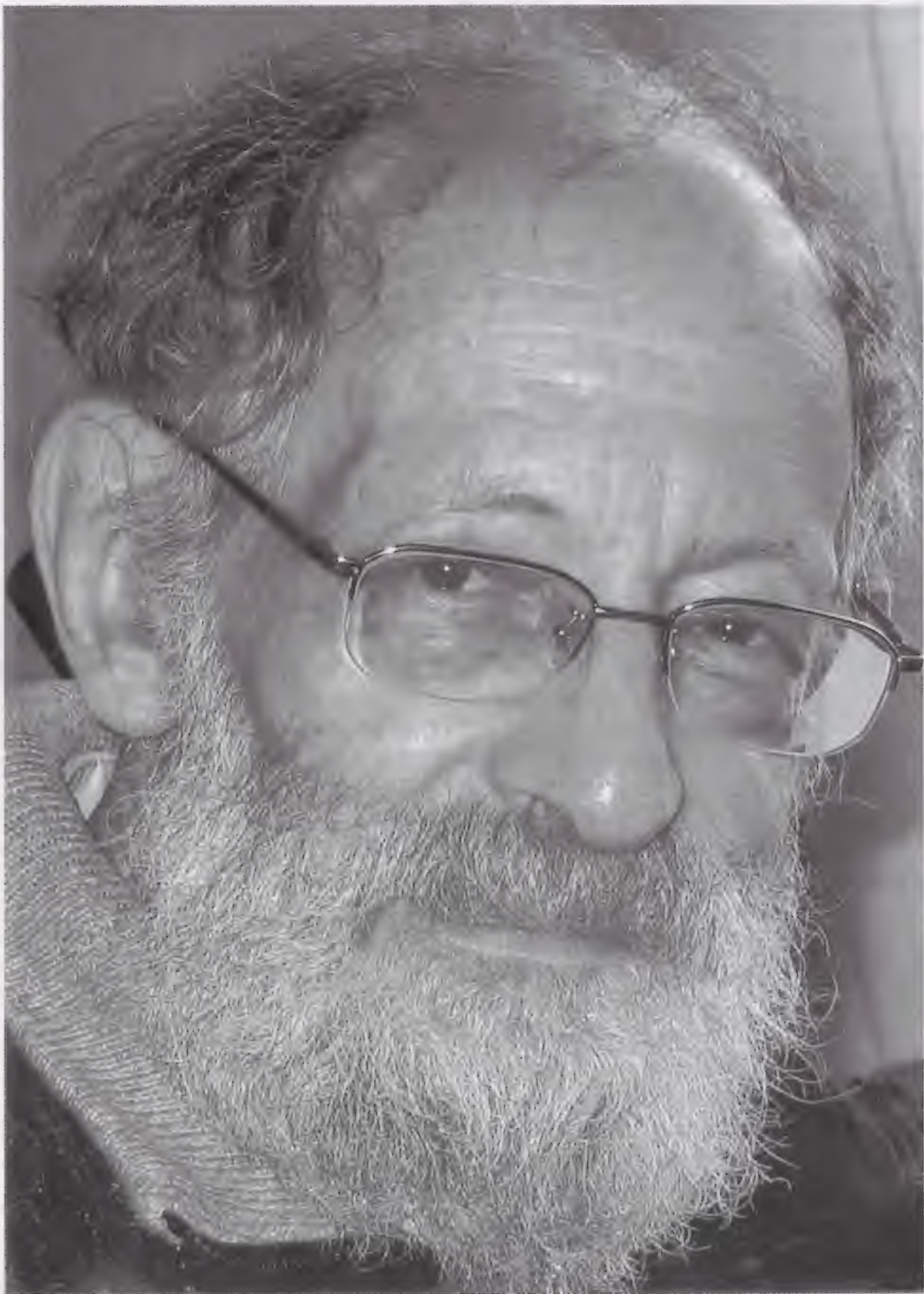
Izyaslav Moiseyevich Kerzhner – Commissioner 1996–2008, entomologist, Professor and Chief Researcher of the Zoological Institute of the Russian Academy of Sciences

Izyaslav (Izya) Moiseyevich Kerzhner, a Commissioner of the International Commission on Zoological Nomenclature since 1996, died on 29 May 2008 at the age of 72 in St. Petersburg. Prof. Kerzhner was a leading taxonomist and world specialist on Hemiptera and a Chief Researcher of the Zoological Institute of the Russian Academy of Sciences. He was among the leading lights in zoological nomenclature, providing insight into challenging nomenclatural puzzles and participating in international debates on the Code right up until the time of his death.

Izyaslav Moiseyevich loved insects and mathematics from early childhood. In 1953 he enrolled in Kishinev University, but unfortunately their Department of Entomology closed shortly thereafter. He managed to move to Leningrad – a very difficult feat at that time – where he became a student at the Department of Entomology of the Leningrad State University and studied under the famous Professor A.S. Danilevsky, then Head of Department. It was Danilevsky who suggested that Izyaslav Moiseyevich study the systematics of Hemiptera; the study of the suborder Heteroptera remained the primary focus of all his scientific activities and the central objective of his life. After graduation in 1958 Izyaslav Moiseyevich was employed at the Zoological Institute of the Russian Academy of Sciences and started work under the supervision of Professor A.N. Kiritshenko. He soon became a recognised expert, and contributed the Heteroptera section to the *Key for the Identification of Insects of the European USSR*, which was a huge, multi-volume project that lasted several decades. In 1965 Izyaslav Moiseyevich defended his Ph.D. thesis on predatory Heteroptera of the family NABIDAE (damselfly bugs) of the USSR. He was skilled in the taxonomy and identification of most of the Palearctic Heteroptera fauna, and considerably improved the scientific understanding of MIRIDAE, PENTATOMIDAE, COREIDAE and many other families; however he continued to work on the NABIDAE of the world throughout his whole career.

In 1990 Izyaslav Moiseyevich obtained the degree of Doctor of Sciences (a prestigious higher second doctorate) with his book ‘Heteroptera of the family NABIDAE of the world’, a major contribution to the systematics, zoogeography, biology and morphology of damselfly bugs.

The scientific interests of Izyaslav Moiseyevich were extraordinarily wide. Like his scientific supervisor A.N. Kiritshenko, he became an expert on the history of entomology and zoology in general, and he had a nuanced perspective of the history of scientific work on the Russian fauna. He provided an extremely useful review of the history of the investigation of the fauna of Mongolia in the first volume of the *Insects of Mongolia*. He also developed a deep knowledge of the entomological literature; library activities played an important role in Izyaslav Moiseyevich’s work. His expertise was recognised by the staff of the scientific library of the Zoological Institute of the Russian Academy of Sciences, where he was an indispensable adviser on the subject of dates of publication of rare books and papers. Even during his last illness Izyaslav Moiseyevich regularly came to the Institute’s library with colleagues to resolve bibliographic problems. He had a strong sense of order, and an



I.M. Kerzhner
1936–2008

Photo kindly supplied by K.G. Mikhailov.

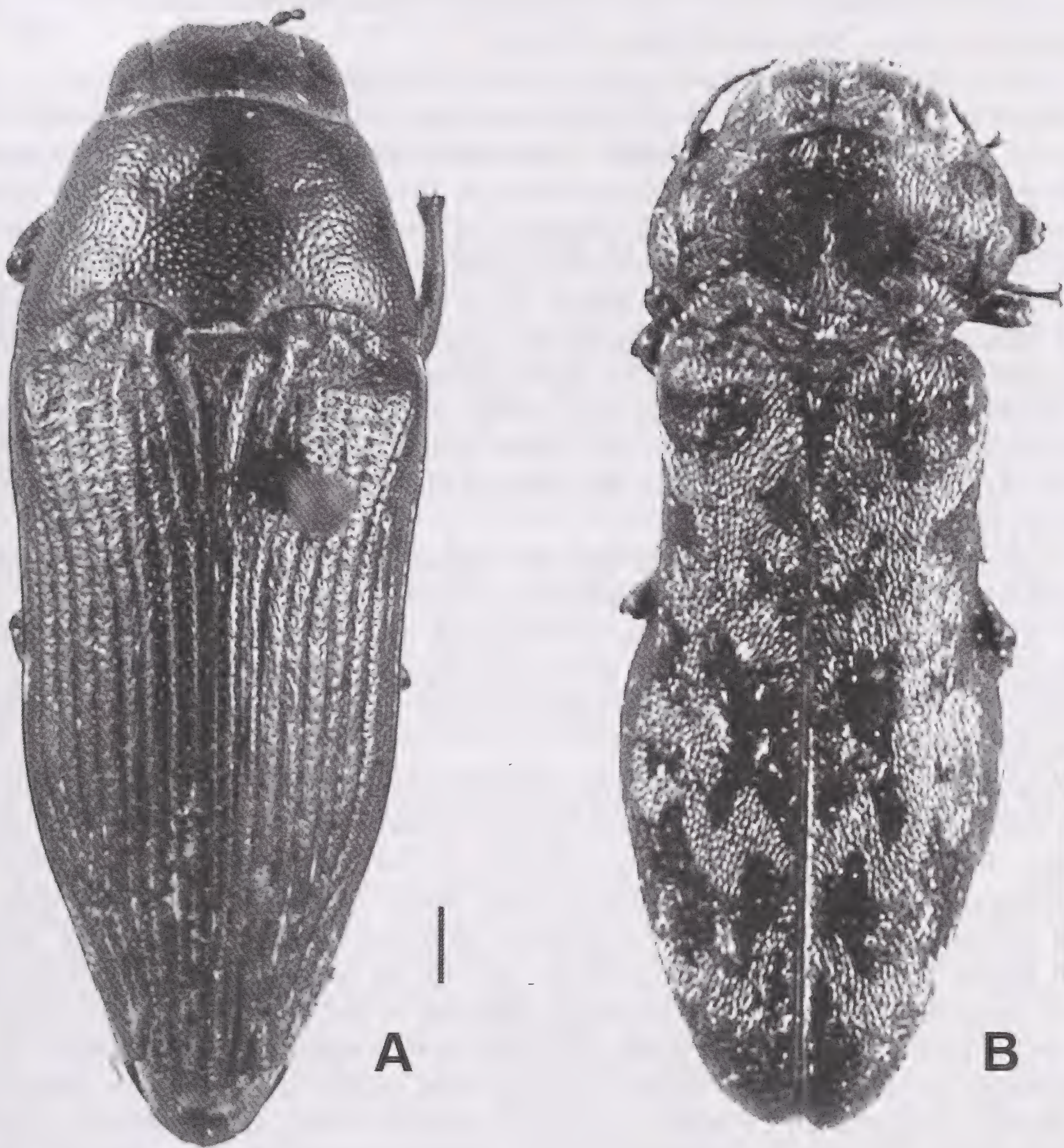


Fig. 1. A. Two of more than 115 insects named after I.M. Kerzhner. *Sphenoptera* (*Chrysoblemma*) *kerzhneri* Volkovitsh & Kalashian, 2001, holotype, Kazakhstan (Kzyl-Orda), ZIN, St. Petersburg. **B.** *Neotoxoscelus kerzhneri* (Alexeev, 1975) (described as *Cryptodactylus* (*Paracryptodactylus*) *kerzhneri*), paratype, Mongolia, leg. I. Kerzhner, ZIN, St. Petersburg. Scale bar=1 mm. Photo by M.G. Volkovitsh.

overwhelming desire to see tasks, once commenced, through to completion. For example, he could spend days and months meticulously deciphering illegible specimen labels. These qualities made Izyaslav Moiseyevich an outstanding nomenclaturist. As a Commissioner of the ICZN, he relished the challenge of nomenclatural puzzles, and through his dedication and energy solved a vast number of problems concerning the nomenclature of many groups of animals, not only his beloved Heteroptera. He translated two editions of the International Code of Zoological Nomenclature into Russian, an immense contribution to the development of taxonomy and systematics in countries with Cyrillic-based languages. His linguistic

skills were remarkable; he knew Latin and Greek, English, German and French, and could read Italian, Spanish and basic Chinese!

Izyaslav Moiseyevich also advanced the field of taxonomy with his dedication to editorial work. It was mostly through his efforts that the eleven collected volumes of *Insects of Mongolia* were published over many years. He was a founder and Editor-in-Chief of the journal *Zoosystematica Rossica*, which became the only Russian journal specialising in the taxonomy of animals. His editorial role earned him tremendous respect all over the former USSR for his readiness to help colleagues to prepare and publish taxonomic works. In all his work, scientific, nomenclatural and editorial, he demanded of himself the highest standards, but he was never pedantic and did not judge others by these rigorous criteria.

Izyaslav Moiseyevich was also a very skilled insect collector. He participated in numerous expeditions throughout the USSR and Mongolia, and further afield to Cuba, Mexico, the USA, and Israel. He collected extensive and rare material of many insect orders.

Izyaslav Moiseyevich's work with scientific organisations was multifaceted. He was a member of the Scientific Council and Library Council of the Zoological Institute of the Russian Academy of Sciences, the Council and Presidium of the Russian Entomological Society, a member of the International Hemipterists' Society, an Honorary Member of the Russian Entomological Society and of the Hungarian Entomological Society.

Izyaslav Moiseyevich's activities and achievements are too many to list, and one can only admire his high level of professionalism and his multitude of accomplishments. In all that Izyaslav Moiseyevich did, his strictly logical frame of mind, excellent memory, outstanding linguistic ability, broad outlook, remarkable honesty, and extraordinary efficiency shone through. Everyone who was acquainted with him knows that he devoted much of his time to his colleagues, helping them in their research, assisting them in resolving questions of zoological nomenclature and editing scientific editions. The many colleagues who sought his advice, whether on taxonomic or nomenclatural matters, received deep, careful and exhaustive answers.

Izyaslav Moiseyevich's everyday work as a scientific editor, and his generous and expert advice on taxonomy, nomenclature and entomological literature brought him deep respect and gratitude. He was a person of rare talent, generosity, fidelity to principle, and selflessness. His death is an irreparable loss to entomology, nomenclature, and to everyone who knew him closely. The memory of Izyaslav Moiseyevich Kerzhner will always live in our hearts.

Alexander F. Emeljanov, Gleb S. Medvedev, Nina G. Bogutskaya,
Boris A. Korotyaev

(*Zoological Institute of the Russian Academy of Sciences*)

A paper in Russian and in English celebrating Izyaslav Moiseyevich Kerzhner's 70th anniversary, with a list of publications, was published in the *Russian Entomological Journal*, 2006, **15**(2): 109–120.

Taxonomy returns: the first meeting on zoological nomenclature in Japan

Shunsuke F. Mawatari

Hokkaido University, Sapporo, Japan

The recent G8 Summit (7–9 July 2008 at Toyako, Hokkaido) provided a tremendous opportunity to foster discussion on realising an ecologically sustainable society, including a two-day symposium on nomenclature and taxonomy. Hokkaido University (HU), one of the major state universities in Japan, hosted a series of events as part of ‘Sustainability Weeks 2008’ (<http://www.sustain.hokudai.ac.jp/sw2008/english/weeks/index.html>). Researchers, educators, students and citizens from around the globe assembled in Hokkaido, shared their wisdom, and took a step forward towards the future. One of these events, an international symposium on zoological nomenclature entitled ‘Taxonomy Returns,’ held on 28 and 29 June at the Hokkaido University Museum, Sapporo, Japan, was organised by an Asian commissioner of ICZN, Shunsuke F. Mawatari, with financial support from HU (<http://museum-sv.museum.hokudai.ac.jp/activity/symposium/symposium23/>). The symposium was named for two popular Hollywood movies, ‘Batman Returns’ and ‘Superman Returns,’ and like the movies it was a great success. This was the first opportunity for Japanese taxonomists to attend an international meeting on zoological nomenclature in their own country, and participants were fortunate to have Dr Denis Brothers, President of the ICZN, as the main speaker.

On the first day of the symposium, Hiroshi Kajihara (HU) chaired a session entitled ‘Naming Organisms’ aimed at Japanese students, amateurs, specialists and the public alike. In the keynote speech in English with simultaneous translation into Japanese, Dr Brothers explained in clear terms the Zoological Code and the basic mechanism for naming species. Four Japanese biologists then gave presentations in Japanese. Teruaki Nishikawa, Nagoya University Museum, spoke on some problems with the current Zoological Code. Masanori Toda of HU’s Low Temperature Institute asked the audience to consider whether a long-used scientific name should be changed, discussing as an example the case of *Drosophila melanogaster* (Linde et al., Case 3407, Bull. Zool. Nom. 64(4), December 2007: 238–242). Jun-ichi Kojima, an insect specialist from Ibaraki University, objected to a proposal to simplify the placement of new taxa at ranks above or below the species, which may result in reduction of the biological information contained in a classification system. The last speaker, Hideki Nakagawa, a botanist and one of the Japanese translators of the current International Code of Botanical Nomenclature (Vienna Code), outlined its history and explained some new concepts, giving several examples.

The second day comprised a session in English entitled ‘Toward the Future Development of Zoological Nomenclature,’ aimed at specialists in zoological taxonomy. In the first presentation, Denis Brothers spoke on ‘ZooBank and the Next Edition of the Zoological Code.’ The second speaker was Jun-ichi Kojima, Ibaraki University, who proposed a means of ensuring that the nomenclatural codes better communicate biological information and stabilise concepts of informal taxa. The final speaker, Shunsuke F. Mawatari, proposed a simpler way of naming organisms

by skipping the species epithet. He stressed that although his suggestion is so radical that most taxonomists would find it difficult to accept, it provides a basis for discussion on how to streamline complete taxonomic names, increase the citation rate of taxonomists and the citation index of taxonomic journals, and improve both the perceived status of taxonomists and support for taxonomy, an endeavour fundamental to all other branches of biology.

After the formal session, all participants gathered in a round-table forum to discuss the web-registration system expected to be introduced in the next Code. Denis Brothers presented three possible scenarios for the system: Scenario 1, Publication+Registration=Availability (*ZooBank Technical Article*, pp. 3–5); Scenario 2, Registration=Availability (*ZooBank Technical Article*, pp. 5–9); and Scenario 3, Registration=Publication=Availability (*Doug Yanega Post to ZooBank List*, 22 Sept. 2005). When Denis Brothers asked the participants to indicate their choice, astoundingly most preferred Scenario 3, with almost as many preferring Scenario 1. The audience saw the issues of registration and the development of ZooBank as fundamental and relevant. It will be interesting to see how the preferences of Japanese taxonomists are reflected in the opinions of the rest of the global taxonomic community and thus in development of an official web registration system.

Updating the Linnaean Heritage: names as tools for thinking about animals and plants

Gina Douglas

The Linnean Society of London, London, U.K.

On 29 and 30 May 2008, the University of Padua, Italy and the Linnean Society of London held an international two-day meeting in Padua to discuss the continuing importance of nomenclature in communicating science, 250 years after the publication of Linnaeus' 10th edition of *Systema Naturae*.

The first session was held in the historic building of the Accademia Galileiana di Scienze Lettere ed Arti in Padova [The Galileiana Academy of Arts and Science in Padua], with its newly-restored frescoed walls presenting a backdrop to the Welcome Address given by the President of the Academy, Professor Oddone Longo. Professor Longo outlined the history of the Academy and its links to 43 renowned botanists and other natural historians, including Allioni, a correspondent of Linnaeus, and Buffon. The Acting Executive Secretary of the Linnean Society, Ms Gina Douglas, responded with greetings from the Linnean Society and conveyed the regrets of its President, Professor David Cutler, who was unable to be present. The President of the Academy presented the Linnean Society with the Accademia Galileiana's 400th Anniversary Medal, which Ms Douglas received on behalf of the Society, thanking him and the Academy for both their gift and their hospitality, promising to convey the medal safely to the President of the Linnean Society.

Session 1: Present and future of Linnaean Names

Professor Alessandro Minelli opened the formal presentations by welcoming delegates and sketching in the background to the present meeting, which arose from discussions after the 2007 joint meeting with the Royal Society on the evolution of animals. This was held as part of the Linnaean Tercentenary and was linked to the celebration of the publication of the 10th edition of *Systema Naturae* in 1758 and the beginning of the Code for Zoological Nomenclature. He outlined Padua's historic links with taxonomy through the oldest extant botanic garden, dating from 1545, visited by Pierre Belon in 1553, and its Prefects, such as Pontedera, Marsili and Alpinus. Other significant figures were Antonio Vallisneri Jr., the first professor to have a Chair in Natural History at the University of Padua, and Giovanni Canestrini, the first zoology professor in Padua, and also first translator of Darwin's major works into Italian.

Professor Minelli identified the purpose of the meeting as a discussion of the ways in which names continued to play a key role in biological identification but supra specific identification and equivalent status of different ranks and classes across taxa were often unclear. He called on Gina Douglas to chair the session and she invited the first speaker, Professor Otto Kraus from Hamburg, a former President of the International Commission on Zoological Nomenclature, to speak on 'The Linnaean foundations of zoological and botanical nomenclature'. After this comprehensive review of the history of codes of nomenclature, including discussion on problems of synonyms and homonyms and on cladistic and phylogenetic approaches, Professor

Kraus concluded by pointing out that nomenclature and classification were two different concepts and that, with the magnitude of the task still remaining, use of the existing codes was the only practical way forward.

Following questions and discussion, Ms Douglas asked the next speaker, Dr Ellinor Michel, from the ICZN, London, to speak on 'Registering animal names – problems and strategies'. Dr Michel outlined the development of a web-based registry of names in ZooBank, highlighting possible solutions for quality control of data accuracy and the logistical challenges of registering millions of animal names. She underscored the difference between taxonomy and nomenclature, with the link between the two formed by the type specimen. In discussion, Professor Alain Dubois, from Paris, questioned whether a web-based tool is adequately accessible to all taxonomists, especially in 'countries of the south', and Professor Werner Greuter, from Berlin, commented on his experience with registration from a botanical point of view. In a coordinated talk, the next speaker, Dr Richard Pyle, from Honolulu, elaborated further on 'ZooBank: the official registry of zoological names'. He identified the four major elements underlying the register of names: 1) nomenclatural acts (e.g. new species, lectotypification, creation of higher rank names and new combinations), 2) publications, 3) authors of publications and 4) type specimen information (with the potential to crosslink to museum collections). He identified the alternative scenarios for registration and how this could be related to the availability of zoological names. He emphasised that the zoological community has the opportunity and responsibility to communicate their preferences for the future role of ZooBank and nomenclatural registration, as the plan for the future is currently being developed. He also presented technical aspects of how a web-registry works, stressing that the apparently complex Global Unique Identifiers were designed to be read by computers, not people, but were permanent and unambiguous and could be generated locally.

The session ended with the last speaker of the morning, Professor Greuter, presenting 'Botanical nomenclature: the Linnaean heritage today'. He reviewed the historical foundations of nomenclature from its Aristotelian origins and necessities arising after the death of Linnaeus. He discussed attempts to produce a unified code, including one in Esperanto, the draft BioCode feasibility study and the chaos which would result from the Phylocode. Like the first speaker he saw proper application of the existing codes as the way forward, with registration of names offering one potential solution. A wide-ranging discussion ended the morning session.

Session 2: Phylogenetic hypotheses and the names for higher taxa

The second session was held in the lecture theatre at the Orto Botanico [The Botanic Garden], with Dr Daniel Goujet from Paris in the Chair. He called on Professor Dubois to speak on 'Phylogenetic hypotheses and nomina of taxa'. Professor Dubois gave a comprehensive account of the underlying philosophy governing the hierarchy of taxa and the nominal series underlying the various codes of nomenclature, commenting that nomenclature itself is just a tool of taxonomy. He stressed the need for the rules to be theory-free, thus excluding cladistic systems. He concluded by identifying ways in which taxonomic categories might be used for quantitative analysis, addressing the 'taxonomic impediment' and the ongoing biodiversity crisis.

After a short but vigorous discussion on terminology, the chairman called on Dr Mark Wilkinson, from London, to speak on 'Reference taxa for phylogenetic nomenclature'. Dr Wilkinson drew heavily on examples from his own subject speciality, caecilian amphibians, where nomenclatural systems incorporating phylogenetic information had resulted in unstable taxa. He demonstrated how support for phylogenetic trees could be determined and tested. Discussion on ways to maximise phylogenetic and nomenclatural stability ended the session.

Delegates also had an opportunity to view a display on 'We are all Naturalists: from Linnaeus to Darwin' in the Museo Botanico [Botanical Museum], including a special presentation on the 'History of the type of the Leatherback turtle' (*Dermochelys coriacea* Vandelli, 1761). The day ended with a guided tour of the Orto Botanico by the current Prefect, Professor Elsa Cappelletti, followed by a concert by the Skyensemble, a team of nine musicians based in Verona, and a conference dinner held in a restaurant in the surrounding countryside.

Session 3: Nomenclature for morphology and developmental biology

After welcoming delegates to the Palazzo del Bò, home of the University of Padua, Professor Minelli gave a brief account of the history of the Archivio Antico meeting room, with cabinets containing the records of students of past centuries. He asked Dr Traudl Krapp, from Bonn, to take the chair. The first speaker, Dr Greg Edgecombe, from London, addressed the subject of 'Anatomical nomenclature and data matrices' and the ways in which discussion on homologous structures are reflected in anatomical names. He pointed out the importance of establishing a standard orientation as a basis for terminology. He further explained how character concepts can become more rigorous with web-based tools such as MorphoBank and MorphBank, as they can be linked to specimen images and help fix morphological terms, with exemplar species linked to voucher specimens.

He was followed by Dr Lars Vogt, from Berlin, speaking on 'The linguistic problem in morphology: updating the Linnaean heritage'. Dr Vogt began by outlining the historical burden, starting with Aristotle and essentialist definitions to the empirical approach and the scientific revolution. He identified one of the current problems as being the link between evolutionary concepts and homologous assumptions, ending by offering solutions using morphological terminology based on structure and free from taxon-based assumptions. The session resumed, after a coffee break, with Professor Rolf Rutishauser, from Zurich, talking on 'Morphological nomenclature for a continuum of forms' and showing us, with graphic imagery, how plant morphology was often not clearly defined, with a continuum of 'fuzzy' sets often present. He identified the need for a Plant Structure Ontology based on neutral homology and expressed hope that evo-devo research would help in identifying the control genes underlying the plasticity of plant forms. The session ended with Dr Giuseppe Fusco, from Padua, presenting 'Morphological nomenclature, between pattern and process' and showing with clear examples how assumptions on morphological patterns such as segments and segmentation were not always as clear-cut as first appeared. He discussed 'conceptual traps' and the way in which use of some terms implied homology or evolutionary processes where these might not exist. The session ended with a general discussion on the complexity of terminology.

Before the final session, those attending the meeting had an opportunity to see Galileo's podium and the Aula Magna, as well as the restored Anatomical theatre. Professor Minelli drew attention to the many foreign former students in Padua, including William Harvey and Olof Rudbeck among others.

Session 4: Taxonomic information: organised or itemised?

Opening the final session, Professor Carlo Violani, from Pavia, in the chair, called on Dr Nicolas Bailly, from Los Baños, Philippines, to talk on 'The structure of taxonomic information: the 'Fishbase – catalogue of fishes' collaborative experience'. Dr Bailly began by identifying the magnitude of the task and the way in which Fishbase was maintained and developed. He showed the global growth of recognised fish taxa, especially in freshwater species in Southeast Asia and Amazonia, and the challenge faced in long-term maintenance of this biodiversity database. He was followed by Dr Fabio Stoch, from Rome, speaking on 'The structure of taxonomic information: the 'Checklist of the animal species of Italy' experience'. He informed us that Italy was the first European country to produce a national checklist, beginning work in 1991, but that this had involved 272 specialists in 15 countries and had helped initiate the Fauna Europaea project. He explained how the database entry had developed and how it provided local and regional information, showing the high endemism and species richness of Italy. He ended by identifying the huge task still ahead, with the next millennium being a predicted completion date but with increasing extinction rates making this a race against time, with an ever-increasing 'Linnaean shortfall' in both taxonomists and support. The last presentation, by Dr Sandra Knapp, from London, on 'The structure of taxonomic information: the Solanaceae experience' was a virtual presentation as Dr Knapp could not attend in person. Dr Knapp spoke on a project she had been involved in, with worldwide contributions to a web-based 'monograph' on the Solanaceae, one of the most species rich plant families and with strong economic significance. She showed how formal diagnoses could be broken down into component parts as searchable word strings and linked to publications and images, with photographic 'specimens' and GPS information providing 'collection data'. After brief discussion the meeting ended with thanks to Professor Minelli and his team and to all speakers. Professor Minelli asked all contributors to send him their papers for publication in *Zootaxa*.